Filling in the gaps of Greek nominalizations

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Greek utilizes several suffixes to form abstract deverbal nominals, including zero suffixation. Although any root can in principle yield abstract deverbal nominals via multiple suffixes, there are certain gaps in the distribution of the various suffixes, which impose a great amount of complexity in lexical selection. Some indicative examples are presented in (1):

(1)

	Verb	Zero-suffixation		*-s(i)*	*-sim(o)*	*-ma*
		ablaut	no ablaut			
a.	ɣráf-o 'I write'	-	ɣraf-**Ø**-í	-	ɣráp-**sim**-o	ɣrá-**ma**
b.	klév-o 'I steal'	klop-**Ø**-í	-	-	klép-**sim**-o	-
c.	plék-o 'I knit'	plok-**Ø**-í	-	plék-**s**-i	plék-**sim**-o	pléɣ-**ma**
d.	spér-n-o 'I sow'	spor-**Ø**-á	-	-	spár-**sim**-o	spér-**ma**
e.	iðrí-o 'I found'	-	-	íðri-**s**-i	-	íðri-**ma**
f.	aníɣ-o 'I open'	-	-	ánik-**s**-i	-	ániɣ-**ma**

In this paper we investigate the distribution of the relevant suffixes, and we show that many of these gaps may be attributed to phonological or morphosyntactic conditioning. We also show that, in the remaining gaps that are lexically conditioned, there can still be found systematic tendencies.

Phonology-driven gaps. (a) Distribution of *-sim(o)*: As can be seen in (1a–d), monosyllabic root exponents such as *ɣraf-* and *klev-* may combine both with *-Ø* and *-sim(o)*. On the other hand, formations like ***iðri-sim-o** and ***anik-sim-o** are ungrammatical (1e–f). This gap is not accidental, given that the same constraint applies to any root that consists of more than one syllable (see Malikouti-Drachman & Drachman 1989, 1995). We thus conclude that *-sim(o)* is selected to realize the *n* node only when the exponent of the previous constituent is monosyllabic. This is why it is excluded from noun formations formed with an overt verbalizer or a prepositional prefix (e.g., *ɣráf-o* 'I write' – *ɣráp-**sim**-o* vs. *kataɣráf-o* 'I record' – **kataɣráp-**sim**-o*).

(b) Zero derivation & ablaut: Zero derivation in Greek results in nouns of all three genders. Feminine and masculine formations may be accompanied by ablauting of the root vowel into *o* like the ones in (1a–d), which end in a stressed theme vowel. These formations involve a phonologically conditioned allomorphy, i.e., the theme vowel is /i/ unless it is preceded by the consonant /r/, in which case it surfaces as /a/. Additionally, there are gaps in the distribution of ablauting, since it does not appear in all nominal formations (compare the examples in 1a and 1b–d). We will show that ablaut appears only with root exponents that include weak vowels (in the sense of Smolensky & Goldrick 2016), i.e., vowels that are prone to change (see, for instance, the vowel alternations in the root exponent in 1d). We will propose that such zero derivations involve a floating vowel /o/ exponent of the *n* head, the distribution of which is regulated by the phonological computation of its strength in relation to the strength of the relevant root vowel.

Morphosyntax-driven gaps: Greek nominalizations may fall into two broad categories (cf. Markantonatou 1992, 1995; Alexiadou 2001; Alexiadou & Anagnostopoulou 2023, among others): (i) nouns that denote events and may also have argument structure (2a–c); (ii) nouns with no eventive reading or argument structure (3a–c):

(2) a. to ɣráp-**sim**-o tis ékθesis 'the writing of the essay'
b. to plék-**sim**-o tu pulóver 'the knitting of the sweater'

	c.	i iðri-**s**-i tu panepistimíu	'the foundation of the university'
(3)	a.	i mikroɣrámati ɣraf-**Ø**-í	'the lowercase writing'
	b.	i aɣonióðis plok-**Ø**-í	'the thrilling plot'
	c.	to filanθropikó íðri-**ma**	'the charitable foundation'

Building on the distinction between verb-derived and root derived nouns that has been suggested in the DM literature (e.g. Arad 2003, 2005; Embick 2010), we argue that the nouns in (2) derive from verbal bases (i.e. the nominalizing head, which is realized by *-sim(o)*, *-s(i),* and *-Ø*, merges with a *v* or a Voice/Aspect node), whereas the nouns in (3) derive from the direct merge of a nominalizer and a root and, therefore, may have idiosyncratic meanings (see also Alexiadou & Anagnostopoulou 2023). Interestingly, all suffixes except *-sim(o)* may participate in both types of nominal formations; in other words, they can realize the *n* node in both cases, i.e., when the *n* node is either directly attached to a root or to a verbal constituent. On the other hand, the suffix *-sim(o)* only participates in nominalizations with a transparent eventive meaning, which means that it cannot be the exponent of a nominalizing head that attaches directly to a root.

Taking out the conditioning factors discussed above, there are many gaps remaining in the distribution of the relevant suffixes, which may be attributed to lexical conditioning. Interestingly, there seem to exist certain patterns behind the distribution of the suffixes: (a) Although *-sim(o)* can be found in nouns that are mostly used in informal (e.g. *klep-**sim**-o*) or neutral (e.g. *ɣrap-**sim**-o*) registers, it cannot combine with root exponents that are clearly classified as learned vocabulary items, even if they are monosyllabic. For example, the root exponent *rip-* of the root √THROW, which is found in the archaic verb *ríp-t-o* 'I throw', can combine with *-s(i)* (*ríp-**s**-i* 'throwing') but not with *-sim(o)* (**rip-**sim**-o*), as opposed to the synonymous and etymologically related but informal root exponent *rix-* (*rík-**sim**-o* 'throwing'). (b) Certain verbalizers seem to opt for certain nominalizers; thus, the verbalizer *-iz* and *-o(n)* opt for the suffixes *-m(ós)* and *-ma* (e.g., *kaθar-iz-**m**-ó-s*/*kaθár-iz-**ma*** 'cleaning'; *siðér-o-**ma*** 'ironing'), whereas the verbalizers *-in* and *-en/-an* almost exclusively opt for the suffix *-s(i)* (e.g., *epi-táx-in-**s**-i* 'acceleration'; *θérm-an-**s**-i* 'heating'). (c) Verbal constituents with a prepositional prefix almost exclusively opt for the suffix *-s(i)*, even if they involve a verbalizer that would have opted for a different suffix (e.g., *eks-ápl-o-**s**-i* vs. *ápl-o-**ma*** 'spreading').

We will attempt to provide an analysis of how these gaps are accounted for by means of lexical selection and we will show that (a) lexical selection may be regulated not only by the root itself but also by a larger constituent involving the root, (b) lexical selection is sensitive to the exact exponence of the previous constituent, and (c) all suffixes have some kind of lexical specification, i.e. there is no real elsewhere nominalizing exponent. More specifically, we will propose that the conditioning described above may be formally accounted for by assuming that the *Vocabulary Items* that manifest the nominalizer head *n* involve in their description contextual conditions regarding the appropriate phonological, morphosyntactic and lexical environment for their insertion. Such conditions may refer to the element that merges with the nominalizer *n* and, more specifically, to its grammatical/categorial status, its constituent parts, its exponence and the phonological shape of this exponent, as well as to other lexically specified information (e.g. (in)formality).

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